

BLUE WILDRYE

Elymus glaucus

Plant symbol = ELGL

Contributed by: USDA NRCS California State Office and Lockeford Plant Materials Center, California



A.S. Hitchcock. 1950.
Manual of the grasses of the United States.

Key Web Sites

Extensive information about this species is linked to plants.usda.gov--PLANTS web site. To access this information, go to the PLANTS web site, select this plant, and utilize the links at the bottom of the Plants Profile for this species. Also, refer to the Calflora website at www.calflora.org.

Uses

Blue wildrye is good for streambank restoration, meadow and swale seeding. It is also excellent for reseeding burned or disturbed areas in oak woodland or forest. It is very tolerant of fire, burning quickly with little downward transfer of heat. Blue wildrye can also provide excellent wildlife habitat for mammals, birds, and waterfowl. It provides good forage early in the season, but later, may be too coarse and stemmy.

Ethnobotanic: Blue wildrye has similar uses as creeping wild rye, primarily as a cereal grain. It is less desirable for basketry as the nodes are thick, but this does not exclude its use in some baskets. Similar to creeping wildrye, there may be some ceremonial uses of blue wildrye.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Weediness

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, or state natural resource or agriculture department regarding its status and use. Weed information is also available from the PLANTS website.

Description

General: Blue wildrye is a large perennial bunchgrass. It is very tall, with an upright growth habit and just a few stems per plant. It is similar in stature and growth habit to slender wheatgrass. The leaf blades are thin and flat, ranging from 4-12mm (.2-.5 inch) wide. Leaf color changes from green to blue green, with a white waxy coating. If it is given water it will stay green all year. Frosts induce dormancy.

Distribution

Blue wildrye is found throughout California in the foothills and lower mountain slopes, where it is associated with chaparral, as well as open stands of oak and conifers. At lower elevations, it grows in valley grasslands, open areas, alluvial channel banks and swales. It is often found with other native perennial grasses. It's adapted to 25-100 cm (10-40 inches) annual rainfall.

Blue wildrye is also found from California to Alaska and also the Great Plains and northern Mexico.

Habitat

Open areas, chaparral, woodland and forest.

Adaptation

Blue wildrye grows well in both disturbed and undisturbed areas and is a good competitor. It tolerates wide variations in soil and weather conditions, though grows best in good soils. It prefers moisture but tolerates drought and is usually more drought-tolerant than meadow barley and California brome. Some ecotypes are adapted to sunny grassland habitats.

Establishment

Seeds mature in late spring to summer; can be collected for 2-7 weeks depending on ecotype and growing conditions. Seed is up to 6mm long (1/4 in.), germinates easily, and has good seedling vigor. There are approximately 109,000 seeds/lb., and if planted at a rate of 1 lb./acre, there would be approximately 2.6 seeds/square feet.

Management

Forage quality can be excellent when cut before dormancy. It will not survive if grazed to heavily. Likewise, it is generally tolerant of mowing if not cut too short.

Pests and Potential Problems

Rust can be a problem and treating the seed prior to planting with an approved fungicide is recommended.

Seeds and Plant Production

Flowering occurs in the late spring typically April to May. Adequate moisture will promote good seed set, but even under adverse conditions of low moisture, seed will be produced in most years. Seed is ripe 6 to 9 weeks after flowering. There are 311,000 seeds per pound. The planting rate for most vegetative practices is 5 pounds pure live seed per acre drilled and 7 pounds pure live seed per acre broadcast.

Cultivars, Improved, and Selected Materials (and area of origin)

'Mariposa' (CA) - Collected from a native stand near Mariposa, California at an elevation of 600 feet above sea level. 'Mariposa' has shown a preference for loam to clay loam soils. It can persist on moderately deep road cut slopes. It is best grown for seed on well to moderately well drained, moist, medium textured soils. It does not tolerate poor drainage or prolonged flooding.

'Arlington' (WA)- Collected from a native stand two miles north of the city of Arlington in Snohomish County, Washington at an elevation of 200 ft. (61 m) above sea level. 'Arlington' blue wildrye is a native, cool season, perennial bunchgrass. It establishes rapidly from seed but is short-lived. Field evaluations in western Oregon and Washington indicate that 'Arlington' is suitable for erosion control and quick, self-perpetuating cover on logging roads, cut-over timberland, burned areas and steep hillsides. The species may also be less competitive with recently planted forest tree seedlings compared to certain introduced grasses. However, the specific forage value of 'Arlington' and its compatibility with tree plantations is not fully established.

'Elkton' (OR) - Collected from a native stand 11.5 miles northwest of the city of Sutherlin in Douglas County, Oregon at an elevation of 400 ft. (121 m) above sea level. 'Elkton' blue wildrye is a native, cool season, perennial bunchgrass. It establishes rapidly from seed but is relatively short-lived. Evaluations in western Oregon and Washington indicate that 'Elkton' is suitable for erosion control and quick, self-perpetuating cover on logging roads, cutover timber and burned areas and steep hillsides. The species may also be less competitive with recently planted forest tree seedlings compared to *certain* introduced grasses. However, the specific forage value of 'Elkton' and its compatibility with tree plantations not fully established.

Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

References

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USDA-NRCS. *Notice of release of 'Mariposa' blue wildrye*. Lockeford Plant Materials Center, Lockeford.

Yolo County Resource Conservation District. 2000. *Know your natives: a pictorial guide to California native grasses*. Yolo County Resource Conservation District, Woodland.

Prepared By:

Dave Dyer.

USDA NRCS Plant Materials Center
Lockeford, California

Reina O'Beck

USDA NRCS California State Office
Davis, California

Species Coordinator:

Dave Dyer.

USDA NRCS Plant Materials Center
Lockeford, California

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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